

“ The new Sunplus outdoor heater provides a safe, efficient and easy answer for outdoor heating. ”

Sunplus heaters give instant heat, are quick to install and only require minimal maintenance, contrasting gas patio heaters, which also have bulky and costly gas bottles to deal with. Sunplus heaters give heat at the flick of a switch and heat like the sun. The radiant heat passes through the air and heats solid objects making it highly efficient wherever it's installed, making them the ideal outdoor heating solution.

The heaters transmit harmless infra-red radiant energy, like the sun, that turns into heat only when it comes into contact with a solid object such as people.

So you're not heating the atmosphere or having the heat blown away in the wind - unlike outdoor gas heaters.

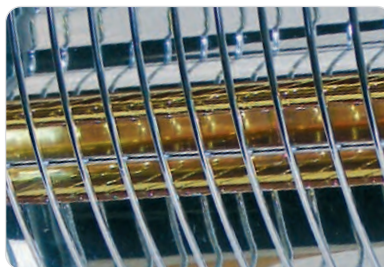
#### Key features

- Low running costs as Radiant heat heats solid objects not the air
- Instant heat cuts the cost of outdoor heating overall
- Silent running with no moving parts or noisy naked flames

- Low capital cost as these heaters allow you to select fewer heaters, but place them exactly where the heating need is
- When used with PIR sensors, further energy savings are available

#### Gold finish halogen lamp

The gold quartz halogen lamp fitted to the Sunplus runs at up to 2,200°C and offers extended performance and 15% greater transmission.



#### Control options

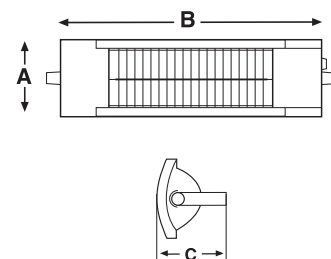


Sunquartz autodriver

#### Technical Specification

- Element - 2kW gold quartz halogen lamp
- Finish - high quality aluminium case in silver
- Reflector - high performance polished reflector
- Fitted guard included
- IP rating - IP24 (splashproof)
- Supply - 230/240V AC single phase

#### Dimensions



#### Product Selector

Model	Reference	Rating	Product description	Height A	Width B	Width C
CSP2	75 775201	2kW	Sunplus outdoor patio heater	159mm	594mm	144mm
CSQAD	85 822084		Sunquartz autodriver PIR			



“ Instant heat right where it’s needed. Sunquartz short wave infra-red heaters warm people, not the air. ”

Their uses are endless, from warehouses to churches. These efficient sun-like heaters can penetrate damp air with minimum heat loss to the atmosphere.

**Key features**

- Up to 90% efficient at converting electricity into energy
- Instant sensation of heat with visible glow at switch on
- Absolutely silent in operation
- Long range heat projection
- Modular design
- Lightweight and silent
- Fitted with wire guard for safety
- 1 and 2 lamp units are suitable for a 230-240V single phase supply
- 3 lamp units are supplied wired for single phase supply but can be connected to a 380-415 volt 3 phase supply

**Control options**

PIR automatic controller senses movement detected within its range and automatically switch on the heater which will remain switched on for a preset time.

The unit is suitable for 500W-6,000W single phase operation. Soft start circuitry is incorporated to reduce the inrush current, allowing cables and fusegear to be rated as for resistive loads and extending lamp life.

The PIR range is adjustable and a temperature hold-off facility will inhibit operation when ambient temperatures exceed a value selected between 10°C and 20°C.

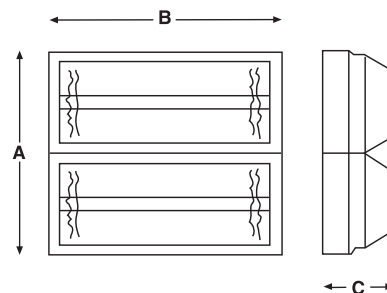


Sunquartz autodriver  
Ref: 85 822084

**Technical Specification**

- Tungsten halogen lamps, 230/240V with ruby red quartz outer sleeve
- Reflectors bright rolled, specular 99.8% aluminium, electro-chemically brightened
- Electro zinc coated steel casing
- High pressure die cast aluminium end castings
- Epoxy polyester powder paint finish white/grey
- Supply - 230/240V AC single phase (3 lamp units can be connected to a 380/415V 3 phase supply)

**Dimensions**



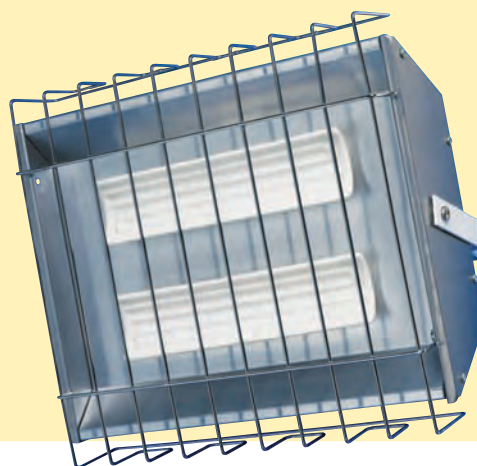
**Product Selector**

Model	Reference	Rating	Number of lamps	Height A	Width B	Depth C
CSQ1.5	75 771801	1.5kW	1	185mm	390mm	115mm
CSQ2.0	75 771802	2kW	1	185mm	390mm	115mm
CSQ3.0	75 771803	3kW	2	370mm	390mm	115mm
CSQ4.0	75 771804	4kW	2	370mm	390mm	115mm
CSQ4.5	75 771806	4.5kW	3	555mm	390mm	115mm
CSQ6.0	75 771807	6kW	3	555mm	390mm	115mm
CSQAD	85 822084	Sunquartz autodriver PIR				

## Ceramic Emitters

Long wave infra-red heaters

## Commercial space heating



“ Long wave infra-red heaters offer highly efficient, silent, space heating. ”

These heaters incorporate dual ceramic emitters to rapidly convert electrical energy into heat energy without producing light.

With no moving parts, these heaters are virtually maintenance-free.

### Key features

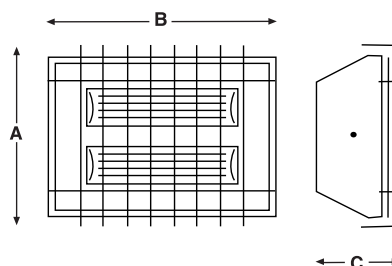
- Durable ceramic emitters which rapidly convert electrical energy into heat energy
- Available in 2, 3 and 4.5kW versions
- No fans or moving components, so no dust contamination to the environment
- Low maintenance
- Good vibration resistance

- Fitted with wire safety guards
- Robust fitting brackets
- Ideal for commercial and industrial application where glare free heat is required

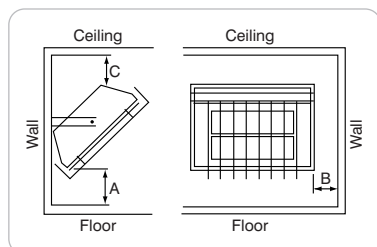
### Technical Specification

- Element - ceramic emitter
- Grey painted steel casing
- Supply - 230/240V AC single phase

### Dimensions



Rating	Height A	Height B	Height C
2kW	1800	300	200
3kW	2500	300	300
4.5kW	3000	500	500



### Area of coverage at minimum mounting height

Heating index	Applications	2kW	3kW	4.5kW
130-150W/m <sup>2</sup>	Shops, meeting halls	7.2m <sup>2</sup>	12.0m <sup>2</sup>	18.8m <sup>2</sup>
150-170W/m <sup>2</sup>	Offices, canteens	6.8m <sup>2</sup>	11.3m <sup>2</sup>	17.7m <sup>2</sup>
170-200W/m <sup>2</sup>	Workshops, garages	6.0m <sup>2</sup>	10.0m <sup>2</sup>	15.7m <sup>2</sup>
220-240W/m <sup>2</sup>	Churches	4.7m <sup>2</sup>	7.8m <sup>2</sup>	12.3m <sup>2</sup>

### Product Selector

Model	Reference	Rating	Height A	Width B	Depth C
CCR2	75 771701	2kW	340mm	376mm	140mm
CCR3	75 771702	3kW	340mm	376mm	140mm
CCR45	75 771703	4.5kW	440mm	376mm	140mm



“ Sunslim is a low cost, robust and easy to install radiant heater. Its tilt mounting allows heat to be localised, or directed to a general area. ”

The Sunslim can be wall-mounted or ceiling hung.

**Key features**

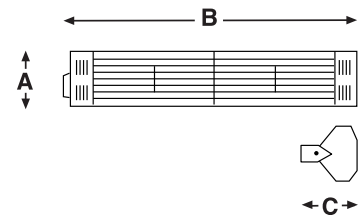
- Instant, directional radiant heat
- Available in 2kW and 3kW versions
- Completely silent in operation
- Lightweight and robust

- Corrosion resistant
- Suitable for bracket or chain mounting
- Easy to install
- Ideal for localised heating in large covered areas such as factories and workshops

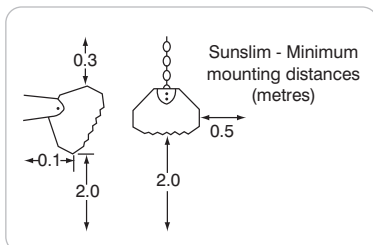
**Technical Specification**

- Element - 'black heat' type
- Zinc coated steel body/matt black end caps
- Chrome plated steel guards
- Anodised aluminium reflector
- Supply - 230/240V AC single phase

**Dimensions**



- Minimum mounting height 2 metres
- 300mm minimum clearance above the heater
- 500mm minimum clearance on either side
- Installation notes: High temperature cable must be used. We recommend the use of a residual current device (RCD)



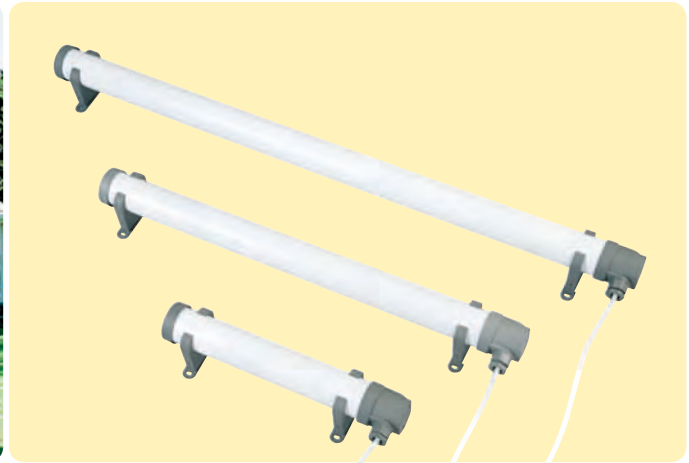
**Sunslim heated area**

Heating index	3kW			2kW		
	H	L	W	H	L	W
10	4.0	5.24	5.49	3.3	4.11	4.53
12	3.6	4.88	4.94	3.0	3.84	4.12
14	3.2	4.51	4.39	2.7	3.57	3.70
16	3.5	4.33	4.12	2.5	3.38	3.43
18	2.8	4.14	3.84	-	-	-

H = mounting height (determined by on-site requirements) L = length of the heated area W = width of the heated area

**Product Selector**

Model	Reference	Rating	Height A	Width B	Depth C
CSL2	75 771601	2kW	108mm	1,215mm	71mm
CSL3	75 771602	3kW	108mm	1,671mm	71mm



“Suntubes are the perfect answer where a steady energy efficient source of heat is needed, providing gentle background warmth and frost protection for both domestic and commercial applications.”

They are highly effective as window demisters and for horticultural use, providing invaluable, effective heating and frost protection in greenhouses and conservatories.

**Key features**

- 60-360W outputs
- A range of 6 lengths and loadings
- Complete with universal mounting brackets for floor or wall fixing and 1m white cable

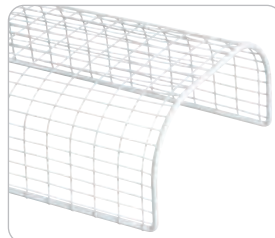
**Optional accessories**



**Interlinking kit**

Available for multiple installations (100mm mounting centres).

Ref: 85 731506



**STG guards\***

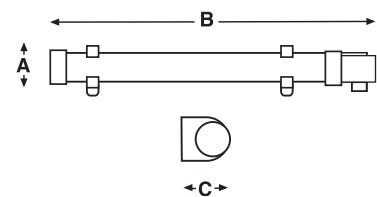
We recommend the use of guards for additional security in sensitive areas such as schools, hospitals and care homes.

These can be obtained from C.Ainao Ltd.  
Tel: 020 7987 1184

**Technical Specification**

- Elements metal sheathed throughout
- Polyester epoxy powder coated aluminium body
- High temperature glass filled nylon end caps and brackets
- Supply - 230/240V AC single phase

**Dimensions**



**Product Selector**

Model	Reference	Guard short code*	Rating	Diameter A	Length B	Depth C
CST1	75 771501	STG1	60 Watts	52mm	410mm	75mm
CST2	75 771502	STG2	120 Watts	52mm	670mm	75mm
CST3	75 771503	STG3	180 Watts	52mm	980mm	75mm
CST4	75 771504	STG4	240 Watts	52mm	1,280mm	75mm
CST5	75 771505	STG5	300 Watts	52mm	1,590mm	75mm
CST6	75 771506	STG6	360 Watts	52mm	1,890mm	75mm
CSIK	85 731506	Interlinking kit				

**Sunfan**  
High level fan heater

Commercial  
space heating



“ Sunfan is a robust 3kW high volume air throughput commercial/industrial wall mounted fan heater designed to provide highly efficient heating in winter, or cool air circulation in summer. ”



**Thermostatic controller (included)**  
For remote switching on/off and variable thermostatic control.

**Technical Specification**

- Flame retardant polycarbonate/glass filled nylon body
- Single phase, 4 pole motor
- Two tone grey (neutral colours)
- Protection - Two thermal cut-outs
- Supply - 230/240V AC single phase

**Key features**

- High air volume throughput of 300m<sup>3</sup>/hour
- Quiet running, totally enclosed motor
- Wall mounted with 2 part self supporting bracket
- Multi-directional adjustment of 45° vertically and 150° horizontally with single screw locking
- High level heating/cooling - ideal for shops and warehouses where wall space is at a premium
- Double insulated
- Supplied complete with variable thermostatic controller

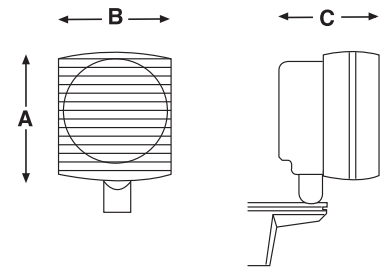
**Control options**

For remote switching on/off and hot/cold air circulation.



Dual control switch (optional)  
Ref: 82 815906

**Dimensions**



- Minimum mounting height 1.8 metres
- 150mm minimum clearance above the heater
- 300mm minimum clearance on either side

**Product Selector**

Model	Reference	Rating	Noise level @3m	Height A	Width B	Depth C
CSF3	75 771401	3kW	40.5dBA	229mm	267mm	260mm
CDCS	82 815906	Dual control switch				

**Sunscreen**  
Warm air curtains

Commercial  
space heating



“ Sunscreen and Sunspot heaters provide the ideal solution for draught exclusion on external doors. ”

When mounted on the inside of an external door they create a 'hot air curtain' to prevent cold draughts entering a building. In summer they can be switched to fan only to form a barrier against incoming dust and provide a refreshing breeze. Suitable for a range of doorway applications in commercial premises such as shops, offices, workshops and stores, the Sunscreen and Sunspot heaters are designed for fast installation with key hole-slots for vertical mounting or brackets providing complete flexibility of adjustment from vertical to horizontal. Easily accessible switches allow the option to run the unit on fan only or at half or full heat output.



Sunspot 2.25kW

The Sunspot is a modular unit almost half the width of the Sunscreen. It can be used with a Sunscreen for wider doorways or on its own as a high level wall-mounted fan heater in commercial premises.

**Technical Specification**

- Element - open coil supported by ceramic insulators
- Zinc coated steel, powder coated body white/grey
- Shaded pole motor
- Protection - thermal safety cut-out
- Supply - 230/240V AC single phase

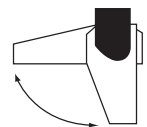
**Dimensions**



Wall Mount



Ceiling Mount



- Can be fixed directly to the wall using the key slot holes provided or angled using the brackets provided
- Mounting directly above the door at a height of between 1.8 and 2.25m

**Product Selector**

Model	Reference	Rating	Height A	Width B	Depth C
CSS3	50 813976	3kW	185mm	610mm	105mm
CSS45	50 813977	4.5kW	185mm	610mm	105mm
CSS225	50 813975	2.25kW	185mm	350mm	105mm